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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,670	02/13/2002	Peter Eisele	A-3172	2676

24131 7590 04/09/2007
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EXAMINER

POPOVICI, DOV

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/075,670		EISELE, PETER	
	Examiner		Art Unit	
	Dov Popovici		2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

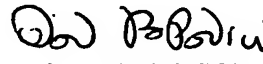
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


 D. POPOVICI
 PRI. EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/12/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Notredame et al (U.S. 6,049,390).

As to claim 1, Notredame et al. discloses a raster generation system (see figure 10) for a printing machine (1019) with an image-setting unit, comprising: at least one raster processor (RIP system 1009) for generating raster data from raw image data; and a memory (1003, 1011, 1013) for storing the raster data while the raster data are being generated by the raster processor (RIP system 1009), said memory formed by a raster memory with random access (Note that page element cache 1011 comprises a chunk of memory in memory 130, 130 is a main random access memory; see column 14, line 63 and column 22, lines 42-43); said raster processor storing the raster data column by column in said raster memory while the raster data are being generated (see column 35, lines 50-52, the raster data is arranged column by column).

As to claim 4, Notredame et al. discloses an image setting unit (1019) and a DMA controller (131; see column 15, lines 1-4) for controlling a transfer of the raster data from the raster memory (130; 1011, 1013) to the image-setting unit (1019, 123).

As to claim 5, Notredame et al. discloses a buffer memory (130; 1011, 1013); the DMA controller (131) providing an output; the buffer memory (130; 1011, 1013) buffering the output of the DMA controller (131).

As to claim 7, Notredame et al. discloses a method of processing raster data for an image-setting unit of a printing machine (see figure 10, printing device 1019), which comprises: generating raster data (generating raster data in the RIP system 1009) line by line from raw image data; storing the raster data column by column (see column 35, lines 50-52, the raster data is arranged column by column) in a raster memory (1011,1013) with random access (Note that page element cache 1011 comprises a chunk of memory in memory 130, 130 is a main random access memory; see column 14, line 63 and column 22, lines 42-43); while being generated by a raster processor; and reading out the raster data column by column into an image-setting unit (see figure 10).

As to claim 8, Notredame et al. discloses using a DMA controller (131; see column 15, lines 1-4) to control the step of reading out the raster data; and buffering the raster data that has been read out in a buffer memory (130; 1011, 1013).

As to claim 9, Notredame et al. discloses wherein the raster data are generated line by line from the raw image data; (see column 35, lines 51-64, note that raster data are generated line by line reads on the raster data is arranged row by row).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notredame et al (U.S. 6,049,390) in view of Agarwal (U.S. Patent Application Publication. Pub. No. US 2001/0022815).

As to claim 2, Notredame et al. teaches a raster memory and a raster processor. However, Notredame et al. does not teach a first plug-in interface board, the raster memory and the raster processor disposed on the first plug-in interface board.

Agarwal teaches a pixel processor and a memory device contained in a single plug-in board.

Therefore, it would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Notredame et al. wherein: the raster memory and the raster processor are disposed on the plug-in interface board.

It would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Notredame et al. by the teaching of Agarwal wherein the raster memory and the raster processor are disposed on the plug-

in interface board, so that if the memory and/or the processor needs repair and/or replacement, the technician could easily replace and/or remove the plug-in board.

As to claim 3, Notredame et al. as modified discloses an image setting unit (1019) and a DMA controller (131; see column 15, lines 1-4) for controlling a transfer of the raster data from the raster memory (130; 1011, 1013) to the image-setting unit (1019, 123).

As to claim 6, Notredame et al. teaches a DMA controller and a buffer memory. However, Notredame et al. does not teach a second plug-in interface board, the DMA controller and the buffer memory disposed on the second plug-in interface board.

Agarwal teaches a converter, capture processor, pixel processor, bus, bus interface and memory device are contained in a single plug-in board.

Therefore, it would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Notredame et al. wherein: the DMA controller and the buffer memory are disposed on the plug-in interface board.

It would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Notredame et al. by the teaching of Agarwal wherein the DMA controller and the buffer memory are disposed on the plug-in interface board, so that if the memory and/or the controller needs repair and/or replacement, the technician could easily replace and/or remove the plug-in board.

Response to Arguments

Applicant's arguments filed 1/16/2007 have been fully considered but they are not persuasive.

With respect to Applicant argument that *"the RIP systems (1009) must already produce a file including the compressed raster images before being sent to the rapid merge system (1003). Since this file is produced outside the rapid merge system (1003) in the RIP system (1009), the memory of the rapid merge system (1003) cannot be considered to be the location and storage wherein the raster image data are generated. Therefore, it is respectfully noted that the Examiner's allegations that the memory in the rapid merge system (1003) is part of the RIP system (1009), are not accurate"*, the argument has been fully considered but is not found to be persuasive.

Claim 1 calls for "A raster generation system for a printing machine with an image-setting unit, comprising: at least one raster processor for generating raster data from raw image data; and a memory for storing the raster data while the raster data are being generated by the raster processor, said memory formed by a raster memory with random access; said raster processor storing the raster data column by column in said raster memory while the raster data are being generated."

The claim does not require or claim that the generation and storage must occur within the same unit.

Notredame et al. discloses a raster generation system (see figure 10) for a printing machine (1019) with an image-setting unit. Notredame et al. discloses at least one raster processor (RIP system 1009) for generating raster data from raw image data;

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and a memory (1003, 1011, 1013) for storing the raster data while the raster data are being generated by the raster processor (RIP system 1009), said memory formed by a raster memory with random access (Note that page element cache 1011 comprises a chunk of memory in memory 130, 130 is a main random access memory; see column 14, line 63 and column 22, lines 42-43); said raster processor storing the raster data column by column in said raster memory while the raster data are being generated (see column 35, lines 50-52, the raster data is arranged column by column). Therefore, the claim limitations are met by Notredame et al.

With respect to Applicant argument that *"Moreover, claims 1 and 7 of the instant application are directed to the raster data generation process, which, in Notredame, is done in the RIP systems (1009) and not in the rapid merge system (1003) thereof. Therefore, the prior art in Notredame, which is described as being part of the rapid merge system (1003) does not say anything about the raster data generating process in the RIP system (1009). Consequently, Notredame also discloses that the post ripping process is part of the rapid merge system (1003) and not of the raster data generating process in the RIP systems (1009) (column 35 lines 46 to 60). Therefore, Notredame explicitly discloses that the memory in the rapid merge system (1003) that is part of the computer system (110) in Fig. 1, is not part of the RIP system, instead, it is the page element cache and page element storage of the rapid merge system (1003)", the argument has been fully considered but is not found to be persuasive.*

The claims call for "said raster processor storing the raster data column by column in said raster memory while the raster data are being generated." (i.e., see claim 1). There is no requirement made in the claims that both the generation and the storage must occur or be made in a single unit as argued. Notredame et al. clearly shows in figure 10 that at least one raster processor (RIP system 1009) for generating raster data from raw image data; and a memory (1003, 1011, 1013) for storing the raster data while the raster data are being generated by the raster processor (RIP system 1009), said memory formed by a raster memory with random access (Note that page element cache 1011 comprises a chunk of memory in memory 130, 130 is a main random access memory; see column 14, line 63 and column 22, lines 42-43); said raster processor storing the raster data column by column in said raster memory while the raster data are being generated (see column 35, lines 50-52, the raster data is arranged column by column). Therefore, the claim limitations are met by Notredame et al.

With respect to Applicant argument that *"As seen from the above-given remarks, the reference does not show storing the raster data column by column in a raster memory with random access while being generated by the raster processor as recited in claims 1 and 7 of the instant application"*, the argument has been fully considered but is not found to be persuasive.

For example, Claim 1 calls for and requires "A raster generation system for a printing machine with an image-setting unit, comprising: at least one raster processor

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for generating raster data from raw image data; and a memory for storing the raster data while the raster data are being generated by the raster processor, said memory formed by a raster memory with random access; said raster processor storing the raster data column by column in said raster memory while the raster data are being generated.”

Again, there are no requirements made in the claims that both the generation and the storage must occur or be made in a single unit as argued.

Notredame et al. discloses a raster generation system (see figure 10) for a printing machine (1019) with an image-setting unit.

Notredame et al. clearly shows at least one raster processor (RIP system 1009) for generating raster data from raw image data. A memory (1003, 1011, 1013) for storing the raster data while the raster data are being generated by the raster processor (RIP system 1009). The memory formed by a raster memory with random access. Note that page element cache 1011 comprises a chunk of memory in memory 130. Note that 130 is a main random access memory (see column 14, line 63 and column 22, lines 42-43). The raster processor storing the raster data column by column in said raster memory while the raster data are being generated (see column 35, lines 50-52, the raster data is arranged column by column). Therefore, the claim limitations are met by Notredame et al reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dov Popovici whose telephone number is 571-272-4083. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dov Popovici
Primary Examiner
Art Unit 2625